

CIVIL AERONAUTICS JOURNAL



ISSUED MONTHLY BY THE CIVIL
AERONAUTICS ADMINISTRATION

DOCUMENTS

MAR 6 1943

VOLUME 4

WASHINGTON, FEBRUARY 15, 1943

NUMBER 2

Duke University Library

Army Pilot's Recklessness Cause of Airline Crash

Full responsibility for the mid-air collision of an American Airlines DC-3 and an Army bomber, October 23, 1942, which was fatal to the 12 persons on the DC-3, has been placed on Lt. William N. Wilson, 25, pilot of the bomber, in the report of an investigation by the Civil Aeronautics Board.

The accident investigation revealed that the flight of the transport was in accord with the civil air regulations and the report stated that "there was no evidence that Captain Pedley" (pilot of the transport), "had any knowledge of Pilot Wilson's (the Army pilot) intention of flying close to the airliner to signal First Officer Reppert. Neither was there any evidence that Reppert had agreed to any arrangement which would have violated either the Civil Air Regulations or good practice."

Bomber Slightly Damaged

The bomber received only minor damage to the right propeller, engine nacelle and de-icer boot. Lieutenant Wilson and his co-pilot, Sgt. Robert Leicht were uninjured, and were able to land their plane in the Palm Springs Army Airport after the collision. The airliner was completely destroyed by impact with the ground and the fire that followed.

The airliner, a Douglas Model DC-3, was on a regularly scheduled trip from Burbank, Calif., to Phoenix, Ariz. The bomber, a B-34, had been dispatched from Long Beach to Palm Springs on a contact flight plan.

Airline Crew Experienced

The investigation found that the transport pilot had logged 5,000 hours and his co-pilot had logged 343 hours, on Douglas DC-3 equipment. It also found that

the bomber pilot had logged about 18 hours in Lockheed bomber equipment of the Army classification B-34, the model involved, but his co-pilot had never soloed a B-34.

Lieutenant Wilson, pilot of the bomber, testified that he was a friend of Louis Reppert, first officer in the airliner, with whom he had trained several months previous to the accident in smaller aircraft. They had met the evening before, found that they might both be going out the next afternoon at the same time and talked over ways to signal each other in the air. No definite signals were decided upon, however, according to the report.

Transport's Rudder Hit

Sergeant Leicht testified that Lieutenant Wilson told him just before their flight that he knew the co-pilot on the airliner and that he would like to "thumb his nose" at him, air language for rocking his wings.

The co-pilot of the bomber testified that at the moment of the impact he saw the airliner immediately below and ahead of them. He observed that the rudder of the airliner had been hit by the propeller of the bomber and that

(See *Army Pilot*, page 20)

Heads CAB Information

The Civil Aeronautics Board has announced the appointment of Edward E. Slattery, Jr., as Chief of the Board's Public Information Section. He has been serving as Acting Chief. Slattery is the author of many aviation articles and stories and has accumulated several hundred hours in the air as an aerial photographer.

Sale of Private Planes Banned By Government

Sale or transfer of privately owned Link trainers or planes of 500 horsepower or less was stopped on January 26, 1943, by order of the War Production Board. Identified as General Limitation Order L-262, the WPB's action was aimed at insuring a supply of training planes for the war effort. It follows:

General Limitation Order L-262

"(a) *Restrictions on transfer of Link trainers and certain aircraft.*—No single-engined aircraft of five hundred horsepower or less, nor any "link trainer," nor any interest therein, shall be sold, leased, traded, rented, given, or delivered by any individual, partnership, association, business trust, corporation, or any organized group of persons (whether incorporated or not), exclusive, however, of the Army or Navy of the United States, any United States Governmental agency, any air carrier holding a certificate of necessity from the Civil Aeronautics Board, or any manufacturer of aircraft, except pursuant to specific authorization of the Director General for Operations.

Reports Required

"(b) *Applicability of priorities regulations.*—This order, and all transactions affected thereby, are subject to the provisions of priorities regulations of the War Production Board, as amended from time to time.

"(c) *Reports.*—All persons affected by this order shall execute and file with the War Production Board such reports and questionnaires as the War Production Board shall from time to time prescribe.

(See *Sale of Planes*, page 20)

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS JOURNAL



ISSUED MONTHLY BY THE CIVIL
AERONAUTICS ADMINISTRATION

VOL. 4 FEBRUARY 15, 1943 No. 2

Published with the approval of the
Director of the Bureau of the Budget

Issued on the 15th of each month. Subscription \$0.50 (foreign \$0.75) per year. Single copies 5 cents. Sold by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.

CONTENTS

	Page
Army pilot's recklessness cause of air-line crash	13
Sale of private planes banned by Government	13
Heads CAB information	13
Study made of wood use in airplanes	14
Aircraft tailor shops save factory retooling	14
New booklet available to aircraft makers	14
Aeronautical legislation	16
New type approvals	17
New aeronautical publications	24
Designation of medical examiners	16

AIR SAFETY

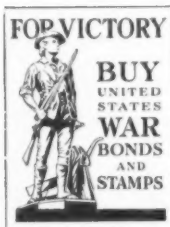
December accidents fatal to four	15
Typical airplane accidents	15
Snow is different, warns Safety Bureau	15

AIR TRANSPORTATION

Airport lighting equipment under Army-Navy control	17
Laredo new stop for Braniff	17
New mail rate for Colonial	17
Domestic air-carrier statistics	18

OFFICIAL ACTIONS

Orders and regulations	21
Status of air regulations	23



— Keep 'Em Flying —

Aircraft Tailor Shops Save Factory Retooling

A chain of aircraft tailoring shops, "modification centers" to adapt planes to the different requirements on all the fighting fronts, has been established in the United States, according to the Office of War Information.

Standard planes coming off production lines can be changed at these centers to fit them for either Arctic or desert operation, to increase their range or build up their bomb loads.

General Jimmy Doolittle's Tokyo raiders were equipped for their special mission at the centers. A majority of the aircraft now being used against the Axis in the Solomons, New Guinea, China, the Aleutians and North Africa are modification jobs. The Japanese met disaster from modified fighters and bombers at Midway.

Factories, tooled up for one model, find in the smaller specialties shops the solution to retooling. They can keep on turning out stock planes and route them on to the centers for special work.

These centers are operated by airlines and aircraft factories under supervision of the U. S. Army Air Forces Materiel Command's Division, or directed by the Air Forces at air depots.

New Booklet Available To Aircraft Makers

A new Army-Navy-Civil Aeronautics Administration publication, ANC-1 (2), "Chordwise Air-Load Distribution," has just been released by the ANC Committee on Aircraft Design Criteria under the supervision of the Aeronautical Board. The publication presents a practical method for determining the chordwise distribution of air forces over conventional and unclassified type airfoils and airfoils with deflected flaps. Examples, illustrating the application of the methods described, are conveniently included for the reader. Acknowledgment for the material presented is due to the Bureau of Aeronautics, Navy Department, who sponsored this subject as part of the ANC program.

Copies of the December 1942 revision of ANC-5, "Strength of Aircraft Elements," can now be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. This is the second revision of this publication which was originally issued in January 1938 and which has been the Army-Navy-Civil standard on the strength of aircraft elements since that time.

Under the policy followed by the Civil Aeronautics Administration, free distribution of both ANC-1 (2) and ANC-5 is made only to manufacturers actually engaged in aircraft production. Such distribution is currently being made with Safety Regulation Release No. 140 and No. 141 respectively.

Study Made Of Wood Use In Airplanes

The Army, Navy, and CAA, through the ANC Committee on Aircraft Design Criteria, have been actively engaged for the past ten months in a wood research program designed to provide comprehensive engineering and fabricating information on wood and plywood aircraft structures.

Aircraft manufacturers, unable to get sufficient quantities of aluminum alloy, have been forced to return to the "lost art" of wood and plywood aircraft construction. As an all-around aircraft structural material, wood was abandoned after World War No. 1 to the extent that the present situation left the designers faced with the difficult task of "converting" their designs from metal to plywood. Plywood requires a fabricating technique with which many shop personnel were entirely unfamiliar and practically no engineering design data were available.

Booklets Have Wood Data

The joint efforts of the ANC Committee and the Forest Products Laboratory have resulted in the publication of two restricted documents which have been of considerable assistance to the aircraft industry, particularly the thousands of sub-contractors who, prior to the war, were engaged in manufacturing articles far removed from the aircraft field. These documents, the "ANC Handbook on the Design of Wood Aircraft Structures," and the "Wood Aircraft Fabrication Manual," represent an authoritative and up-to-the-minute compilation of all available information on their respective subjects.

Not content with this, however, the ANC Committee is pushing a research program that will result in important new engineering data on plywood structures. This program is being closely followed and directed by an ANC wood subcommittee, of which Mr. I. C. Peterson of the Aircraft Engineering Division is chairman.

Although the "ANC Wood Handbook" and the "Wood Aircraft Fabrication Manual," have been given a "restricted" status, their distribution to the aircraft industry in general has been quite complete. Any contractor or sub-contractor, actively engaged in producing wood aircraft or wood aircraft parts under cognizance of the CAA, may obtain copies of these restricted documents upon request.

U. S. Leads in Airframes

American aircraft manufacturing plants are now known to be turning out more pounds of airframes per employee than those of any other nation.



December Accidents Fatal to Four

The Safety Bureau received reports of three fatal accidents occurring in non air-carrier flying, and one fatal accident occurring in scheduled domestic air carrier flying for the month of December, 1942. The accident trend in non air-carrier flying was decreased 77% over the month of November, and 40% over the same period for 1941. One accident occurred as follows:

Collision (other aircraft)

1. An instructor and his student in one aircraft were following traffic pattern when another aircraft rapidly overtook them, approaching from an angle of about 45 to 60 degrees. Collision ensued and both aircraft, out of control, struck the ground.

In the two other cases in non air-carrier flying, and the one case in air carrier flying, the investigator's reports have not yet been received.

A table comparing the fatal accidents in November and December 1941 and 1942, follows:

	Non air-carrier	Air carrier		Total
		Domestic	Foreign	
December 1942.....	3	1	-----	4
December 1941.....	5	-----	-----	5
November 1942.....	13	-----	-----	13
November 1941.....	9	-----	-----	9

Corrections

The report for August should be revised to include only 13 fatal accidents instead of 14.

During the month of May 1942 an accident occurred in which the pilot was seriously injured. The pilot succumbed from these injuries two days later, but information was not received until December. This necessitates another revision in the number of accidents reported in May. The total number revised, in nonair-carrier flying, should be 14.

Typical Airplane Accidents

Findings Result In CAA Bulletin

The Civil Aeronautics Administration has issued Maintenance Bulletin No. 71 as a result of the findings of the Safety Bureau given in the report below. The bulletin instructs owners of the Luscombe 8A and similar type models to make certain that sufficient clearance exists between the pertinent parts of the rudder control system, and suggests that the bolts at the bell-crank be inserted from the top. These precautions can be expected to eliminate any further difficulty from this source. A report of the accident follows:

Instructor John Daly Kerrigan and his student, Norman Hazen Nickerson, parachuted to safety following a mechanical failure of their aircraft during flight on July 7, 1942. They sustained minor scratches. The failure occurred over Popponesset Woods, Mass., about 6½ miles southeast of the Falmouth Municipal Airport. Kerrigan held a commercial pilot certificate with single-engine land and water 0-220 h. p. and flight instructor ratings. He had accumulated over 2,400 flying hours. Nickerson held a student pilot certificate. The aircraft, a Luscombe 8A, with the exception of the Continental 65 h. p. engine, was damaged beyond repair.

Kerrigan demonstrated a two-turn spin to the right at 3,500 feet and a

normal recovery was made at 2,900 feet. The student then took control and the plane was again climbed to 3,500 feet, where an intentional left-hand spin was entered. After 1¼ turns the student, in attempting to recover, was unable to neutralize the rudder controls and the left rudder pedal appeared to be locked in the full forward position. Instructor Kerrigan immediately took control but all of his attempts to free the controls failed. When the airplane was still 1,000 feet above the ground the instructor ordered the student to jump. Kerrigan waited for the student's parachute to open, then cut the magneto switches, and shut off the fuel. He jumped when the plane was at an altitude of about 500 feet. The instructor, student and airplane all landed in a woods within approximately 650 feet of each other.

Examination of the wreckage revealed that a castle-nut, connecting a turnbuckle on one of the rudder cables to the bell-crank just aft of the baggage compartment, was jammed against the vertical flange of a fuselage supporting angle. This condition prevented the operation of the rudder. There were signs of galling on the supporting angle indicating that interference between this member and the castle-nut had been present for some time. It was ascertained that had the jammed castle-nut and its bolt been installed in reverse, i. e., the bolt inserted from the top

Snow Is Different Warns Safety Bureau

Following is the text of a bulletin issued by the Safety Bureau of the Civil Aeronautics Board:

Flight from snow-covered surfaces presents problems which differ from those encountered in operations from paved runways or sod fields. In some ways, a landing on skis is easier to accomplish than one on wheels. For example, landing with drift caused by cross winds will have little adverse effect even in soft snow. On glare ice and smooth hard snow a plane will often weathercock into the wind and travel sideways for a considerable distance due to momentum. When encountering such a condition, do not use power in an effort to straighten out: the use of power may result in the airplane whirling dizzily and, if the area is small, may carry you into obstructions. The expert can cause the airplane to rotate 180° and by a judicious application of power thus obtain braking action. The novice, however, should practice this only when there is plenty of room and the surface is relatively smooth.

It is difficult, especially under some light conditions, to judge height above a snow surface when approaching for a landing. The tendency is to level off too high with a resulting drop which may damage the landing gear. On snow it is a good rule to land fast with tail high when using either wheels or skis. If you are on wheels and land in snow deep and soft enough to cause the plane to nose-over, the nose-over will occur only when the speed has reduced sufficiently to allow the airplane to settle. A nose-over can often be prevented under such conditions by holding the stick back and using power to blast the tail down.

When landing on snow-covered fields, avoid dark spots. They indicate points where the wind has blown away most of the snow. The ground may be extremely rough and since it is frozen, a rut or hummock may snap an axle.

When taking off from snow-covered areas in an airplane equipped with wheels, it is good practice to take-off "tail-low" as this will tend to avoid the possibility of a nose-over should the wheels strike a soft spot before flying speed is reached.

instead of from the bottom, the interference of this part with the supporting angle probably would not have occurred.

It was noted further that increasing the tautness in the cable tended to aggravate this condition. On the day of the accident, in compliance with a Luscombe service bulletin, a new pulley assembly was installed in the aft end of the fuselage to replace a previous fairlead assembly in the rudder system. During this installation the rudder cables may have been tightened more than usual.

(See Accidents, page 16)

Designation of Medical Examiners

During the month of December 1942, the following named physicians were officially designated to perform physical examinations for the Administrator:

FLORIDA—Dr. Matthias P. Meehan, 302 NE. 35th Street, Miami.
ILLINOIS—Dr. David B. Freeman, 1620 Fifth Avenue, Moline.
INDIANA—Dr. Otto H. Swantusch, Beatty Block, Angola.
KENTUCKY—Dr. Charles K. Brosheer, 2024 West Cumberland, Middlesboro.
MICHIGAN—Dr. S. D. Schweinsberg, 401 Savinck Bank Bldg., Marquette.
MISSOURI—Dr. William L. Macon, Jr., Terminal Bldg., Lambert Field, St. Louis; Dr. Howard F. Turner, 1200 South Big Bend Blvd., St. Louis.
NEBRASKA—Dr. Harry M. Hepperlen, Arcade Building, Beatrice.
NEW MEXICO—Dr. Denna C. Daniel, 6 Cherry Street, Clayton.
NEW YORK—Dr. Irwin Felsen, 22 West State Street, Wellsville.
OKLAHOMA—Dr. Milton M. DeArman, 506 Security Bldg., Miami.
PENNSYLVANIA—Dr. John F. Hartman, 724 Sassafras Street, Erie; Dr. Charles C. A. Banes, 2043 North Twelfth Street, Philadelphia; Dr. William B. Clendenning, 195 East High Street, Waynesburg.
TEXAS—Dr. Alvin L. Borchardt, 2030 Cumberland, Vernon.
WASHINGTON—Dr. Walter G. Cowan, 617 Baker Building, Walla Walla.
WYOMING—Dr. Richard M. Leake, Simpson Bldg., Laramie.

Airline Medical Examiner

Dr. William L. Macon, Jr., Terminal Bldg., Lambert Field, St. Louis, Mo.

Examinations Discontinued

The following named physicians are no longer making examinations for the Administrator at the cities indicated.

Dr. Adrian E. Clark, Globe, Ariz.
Dr. Gould Wells, Parker, Ariz.
Dr. Frank C. Melone, Ontario, Calif.
Dr. Orion C. Jones, Santa Maria, Calif.
Dr. Wilfred S. Clark, Ventura, Calif.
Dr. Rufus J. Pearson, Miami, Fla.
Dr. Laurence B. Dunn, Savannah, Ga.
Dr. Marion M. Crum, Angola, Ind.
Dr. Richard B. Smallwood, Bedford, Ind.
Dr. Joe G. Fellows, Ames, Iowa
Dr. David T. Loy, Great Bend, Kans.
Dr. Lyle S. Powell, Lawrence, Kans.
Dr. J. R. Tinsley, Middlesboro, Ky.
Dr. Luther G. Bunker, Waterville, Maine
Dr. Leo J. Cass, Brookline, Mass.
Dr. Daniel P. Hornbogen, Marquette, Mich.
Dr. William F. Mertaugh, Sault Ste. Marie, Mich.
Dr. Charles E. Lemen, Traverse City, Mich.
Dr. James L. Vincent, Wayne, Mich.
Dr. Jan H. Tillisch, Rochester, Minn.
Dr. Sam Bassett, St. Louis, Mo.
Dr. Thomas Cones, St. Louis, Mo.
Dr. Arthur R. Bryant, Beatrice, Neb.
Dr. Lin S. Felder, Winnemucca, Nev.
Dr. Cornelius J. Kraissl, Hackensack, N. J.
Dr. John R. Burbidge, Princeton, N. J.
Dr. Harry Z. Landis, Clayton, N. Mex.
Dr. Roger S. Mitchell, Glens Falls, N. Y.
Dr. Carl F. Hammerstrom, Jamestown, N. Y.
Dr. George F. Reed, Troy, N. Y.
Dr. Edwin F. Comstock, Wellsville, N. Y.
Dr. Willie G. Chesnut, Miami, Okla.
Dr. Ralph E. Schmidt, Erie, Pa.
Dr. John C. Siggins, Philadelphia, Pa.
Dr. Harvey B. Sanborn, Providence, R. I.
Dr. Wilfred C. Carreras, Bristol, Tenn.
Dr. William E. Ryan, Midland, Tex.
Dr. James J. Muirhead, Vernon, Tex.
Dr. Clute E. Rayburn, Waco, Tex.
Dr. Phil Hansen, Richfield, Utah
Dr. Ralph W. Stevens, Walla Walla, Wash.

Airline Medical Examiner

Dr. Sam Bassett, St. Louis, Mo.

Aeronautical Legislation

Listed below are measures concerning aeronautics which are pending before, or have been passed by, Congress.

Introduced

- S. 411—EDUCATION; amendment to the act for the establishment of marine schools was introduced to create a new public-school system for education of masses of American youths in nautical, aviation and related technical fields; referred to the Committee on Commerce.
- S. Res. 59—AIRCRAFT CONSTRUCTION; a resolution for an investigation of the development and construction of civil aircraft and its use in world air commerce; referred to the Committee on Commerce.
- S. Res. 60—AIR ACCIDENTS; a resolution to continue the authority to investigate airplane accidents; referred to the Committee on Commerce.
- H. R. 1115—AMENDMENT TO ACT; a bill to amend the Civil Aeronautics Act of 1938 to further regulate the operation and navigation of air-craft using the navigable air space overlying the United States, and for other purposes; referred to the Committee on Interstate and Foreign Commerce.
- S. 246—AMENDMENT TO ACT; a bill to amend the Civil Aeronautics Act of 1938; referred to the Committee on Commerce.
- H. R. 892—AIRPORTS; a bill to provide for the construction and operation by the Federal Government of a system of new military superhighways and airports for national defense in time of war or insurrection, and for Government and commercial use by automobiles and airplanes in time of peace; referred to the Ways and Means Committee.
- S. 13—OPERATORS; a bill to provide for the training of air-traffic control-tower operators; referred to the Committee on Commerce.
- S. 14—AVIATION SALVAGE; to enact the Aviation Salvage at Sea Convention into statute law in the United States; referred to the Committee on Commerce.
- S. 15—PERSONNEL TRAINING; authorizing the advanced training in aeronautics of technical personnel of the Civil Aeronautics Administration; referred to the Committee on Commerce.
- S. 16—AIRPORT LIGHTING; to promote safety in the development of air commerce by regulating the lighting of airports and other landing areas; referred to the Committee on Commerce.
- S. 25—AVIATION EDUCATION; to establish a Division of Aviation Education in the United States Office of Education, Federal Security Agency; referred to the Committee on Education and Labor.
- S. Res. 15—AVIATION COMMITTEE; resolution introduced for the establishment of the Committee on Civil Aviation and Aeronautics; referred to the Committee on Rules.
- H. R. 831—GLIDER PILOTS; to provide for the training of civil glider pilots; referred to the Committee on Interstate and Foreign Commerce.
- H. R. 61—CIVIL AERONAUTICS AUTHORITY; a bill to provide that the Civil Aeronautics Authority shall be an independent establishment of the Government; referred to the Committee on Interstate and Foreign Commerce.
- H. J. Res. 21—AVIATION FOR MIDSHIPMEN; a resolution providing for aviation training of midshipmen at the United States Naval Academy; referred to the Committee on Naval Affairs.
- H. R. 1514—AIR TRAINING; a bill to provide adequate aeronautical training for the youth of the United States; referred to the Committee on Interstate and Foreign Commerce.

Passed

- H. Res. 33—AIR ACCIDENT COMMITTEE; bill passed to continue the Select Committee to Investigate Air Accidents until March 1, 1943.

Accidents

(Continued from page 15)

Probable Cause.—Inability to recover from an intentional spin, due to jamming of the rudder control system.

Plane Hits Tree-tops In Jagged Take-off

James Patrick Kelly was seriously injured and his passenger, Lawrence J. Kelly, received minor injuries in an accident at Du Pont Airport, Wilmington, Del., June 5, 1942. Kelly held a private pilot certificate and was rated to fly single-engine land-planes of 80 hp. or less. He had flown approximately 50 solo hours. The aircraft, a Luscombe SA, was extensively damaged.

Kelly started diagonally across the northwest runway on a cross-wind take-off toward a clump of trees near the south side of the field. The wind was northeast 10 m. p. h. As the aircraft approached the edge of the runway, the pilot pulled up into a sharp climb of approximately 45°, and maintained this steep climbing angle until he reached an altitude of about 75 feet. The aircraft just cleared several small trees, but struck the tops of higher trees approximately in the center of the woods adjoining the airport. The plane then hit the ground on its nose and remained in a vertical position, headed in the opposite direction from its path of flight.

Kelly stated that after starting his take-off he thought he heard the airport control tower calling, and, while leaning forward in an attempt to tune his radio receiver, he inadvertently put pressure on the left brake pedal, altering the plane's course to the left. Meanwhile the plane had left the ground and the take-off had progressed to a stage where a landing was not practical. Full power was applied in an attempt to clear the trees ahead. Finding that he was unable to get over the taller trees, the pilot closed the throttle, cut the switch, and crashed into the tree tops.

Probable Cause.—Failure to maintain a straight course down the runway during take-off.

Old Plane Falls Apart In Air; Pilot Killed

Lloyd Darwin Deacon was fatally injured in an accident which occurred near Mishawaka Airport, Mishawaka, Ind., May 25, 1942. Deacon held a private pilot certificate, with a single-engine 0-80 h. p. land rating, and had flown about 1,057 hours. The aircraft, a Lincoln Eaglet 230, was demolished.

Deacon took off from the Mishawaka Airport after receiving proper clearance for a local pleasure flight. He circled the airport twice, climbing to an altitude of approximately 2,000 feet, and proceeded to a point southeast of the airport. He made several steep turns and in the execution of the last turn the plane entered a power spin to the left and an object was seen to leave the aircraft. Several turns of the spin were made, during which there was a general

(See Accidents, page 20)



Airport Lighting Equipment Under Army-Navy Control

Airport and seadrome lighting equipment has been brought under the joint control of the Army and the Navy by Limitation Order L-235 of the War Production Board. Most of the airway lighting equipment is also affected by the Limitation Order.

The Order, effective January 5, 1943, is a war measure taken to conserve material by standardizing lighting equipment, by centralizing procurement, and by preventing manufacture and sale of any airport, airway, or seadrome lighting equipment not essential to the war.

To standardize lighting equipment, the manufacture of equipment that does not conform to certain specifications has been banned. Approval of the designs and specifications will rest with the Civil Aeronautics Administration, the War Department and the Navy Department, acting under the sponsorship of the Civil Aeronautics Board.

Sent From Wright Field

Under the new set-up most of the equipment is requisitioned through the Army Air Forces Materiel Center at Wright Field, Dayton, Ohio. The War and Navy Departments decide which fields are to be lighted and which department is to be in charge of estimating the equipment needed—the Civil Aeronautics Administration, War, or Navy. Estimates are sent to the Army Materiel Center, and the necessary equipment is sent directly from Wright Field, or one of the subdepots, to the different airports.

Before the war, the Civil Aeronautics Administration, in charge of all airport lighting equipment, let contracts for all jobs, and the contractors supplied the equipment. It is probable that about 75 contractors and 300 subcontractors will be affected.

Authorization Needed

However, those already under contract to supply equipment to fields of military value may continue to do so through a specific authorization which has the approval of the Director General of Operations. A group of four, one each from the Army and Navy and two from the CAA, act as an advisory committee to WPB in determining whether the manufacturer requesting a specific authorization should be allowed to make, sell, and deliver new lighting equipment.

Non-approved equipment in stock may still be issued by manufacturers to municipal and private airports for use

in repair and maintenance. And manufacture of nonapproved equipment is permitted for experimental purposes, or on authorization for replacements.

It is expected that several advantages will be gained by standardization. Manufacturers will be able to buy and stock identical or similar materials. Standard production techniques permit a uniform system of inspection. Parts will be interchangeable. And the overall output of airport lighting equipment should be greater because standardization will speed up production.

Laredo New Stop For Braniff

The Braniff Airways, Inc., certificate of convenience and necessity for route No. 50 has been amended to authorize air transportation of persons, property, and mail from San Antonio, Tex., to Laredo, Tex. Route No. 50 extends from Houston to San Antonio and from Houston to Corpus Christi. The service on the new extension will not become effective until the Board has advised the airline that national defense no longer requires a delay in the inauguration of the new service.

At Nuevo Laredo, Mex., across the Rio Grande River from Laredo, Tex., the terminal of the new extension, connections will be made with Cia Mexicana Airlines for Monterrey, the principal industrial city in Mexico, and Mexico City, the capital and largest city of the country. Laredo is the second largest city in Texas without air transportation and is located approximately 150 miles from the nearest Texas airline stop.

New Mail Rate for Colonial

The Civil Aeronautics Board has set a new rate of pay for the transportation of mail by Colonial Airlines, Inc., of 21.61 cents per pay mail mile. It became effective December 1, 1942. This applies to route known as FAM No. 1 between New York and Montreal.

The rate formerly paid Colonial was 60 cents per pay mail mile, under Post Office contract, and the present rate will reduce the compensation paid the carrier by approximately \$116,137 under the twelve months ended June 30, 1942.

The Board found that the rates paid Colonial between August 22, 1939, the date the proceeding was instituted and November 30, 1942, were fair and reasonable.

New Type Approvals

(Approval numbers and dates of assignment in parentheses)

Glider

Briegleb, BG-8, 2-place closed land monoplane, Class I. (Glider Type Certificate No. 13, 12-31-42)

Appliances

Switlik, parachute models AN-S1 and AN-S2 seat pack, standard canopy type, 24 ft. and 28 ft. canopy diameter respectively, silk or nylon material. (Type Certificate No. 151, 1-22-43)

Propellers

Sensenich, 72EB and 72EC, wood, 6 ft. diameter, 5 ft. 8 in. to 5 ft. 4 in. pitch, 125 hp, 2,450 rpm. (Type Certificate No. 789, 1-4-43)

Curtiss, C533S 3-blade propeller with 814-1C3-0 blades, steel hub and blades, 15 ft. 0 in. to 12 ft. 6 in. diameter, electrically controllable (feathering) pitch, 1,500 hp, 1,050 rpm. (Type Certificate No. 790, 1-7-43)

Curtiss, C543S 4-blade propeller with 814-1C3-18 blades, steel hub and blades, 13 ft. 8 in. to 12 ft. 8 in. diameter, electrically controllable (feathering) pitch, 1,625 hp, 1,275 rpm. (Type Certificate No. 791, 1-11-43)

Curtiss, C542S 4-blade propeller with 714-1C2-12 blades, steel hub and blades, 12 ft. 2 in. to 10 ft. 8 in. diameter, electrically controllable (feathering) pitch, 1,625 hp, 1,435 rpm. (Type Certificate No. 792, 1-23-43)

New Models Added To Old Type Approvals

(Approval numbers and dates of approval of new models in parentheses)

Aircraft

Piper, J3F-65S, 2-place closed sea monoplane. Engine, Franklin 4AC176-B2. (Type Certificate No. 692, 1-4-43)

Appliances

Hayes, low-pressure wheels, model 752A, 7.50-10. Approved static load per wheel 2,200 lbs. (Type Certificate No. 10, 8-4-42)

Hayes, low-pressure wheels, model 1702M, 17.00-16. Approved static load per wheel 15,000 lbs. (Type Certificate No. 10, 1-22-43)

Engines

The Aviation Corp., Lycoming O-435-C; 6 cyl. horizontal opposed air cooled, direct drive; 185 hp at 2,450 rpm for all operations; weight "dry" 348 lbs. Accessory drives for generator, starter, fuel and vacuum pumps available. (Type Certificate No. 228, 1-11-43)

The Aviation Corp., Lycoming O-290-B and O-290-C; 4 cyl. horizontal opposed air cooled, direct drive; ratings: 150 hp at 2,800 rpm for take-off (one minute) and 125 hp at 2,600 rpm for all other operations. Engine weights "Dry" 247 lbs. and 238 lbs. respectively. Accessory drives for generator, starter, fuel, vacuum, and hydraulic pumps available. (Type Certificate No. 229, 1-22-43)

Propellers

Fahlin, D-762, D-762-1, D-762-2, D-762-3, and D-762-4; wood; diameter 84 in., 83 in., 82 in., 81 in., and 80 in., respectively, pitch 74 in. to 68 in.; 220 hp, 2,100 rpm. (Type Certificate No. 533, 1-26-43)

Stitch Saves Time

Airplane manufacturers "stitch" sheets of metal together by spot and roll weld machines which operate much like sewing machines, thus speeding up warplane production.

Domestic Air Carrier Operation Statistics for the Month of November 1942

Operator	Routes operated	Revenue miles flown	Revenue passengers carried	Revenue passenger miles flown	Express carried (pounds)	Express pound-miles flown	Passenger seat-miles flown	Revenue passenger load factor (percent)
All American Aviation, Inc.	Pittsburgh, Huntington, Philadelphia, Williamsport, Jamestown, etc.	74,352	0	0	8,112	984,644	0	0
American Airlines, Inc.	Dallas to Los Angeles	533,904	9,561	8,535,973	119,479	132,320,773	10,491,991	81.36
	New York to Chicago	393,289	15,892	5,750,517	545,056	232,742,442	7,882,877	72.95
	Boston to New York	106,595	10,765	1,816,379	149,136	23,481,128	2,307,428	82.28
	Boston to Cleveland	17,249	1,374	202,134	16,970	2,791,194	362,229	55.80
	Cleveland to Nashville	59,431	4,367	912,751	69,278	19,055,972	1,238,246	73.71
	Albany to Fort Worth	541,967	15,016	8,767,286	228,803	134,233,395	10,531,359	83.25
	Washington to Chicago	147,575	4,946	2,108,006	82,660	35,546,448	2,917,477	72.25
	Chicago to Fort Worth	101,575	3,549	1,619,803	66,544	43,351,646	2,065,449	78.42
	Buffalo to Toronto	3,800	319	24,244	1,416	107,616	79,800	30.38
	Fort Worth to Mexico City	119,677	741	690,304	2,733	1,950,530	2,124,500	32.49
	Total	2,025,062	66,530	30,427,397	1,282,075	625,581,144	39,901,416	76.26
Branniff Airways, Inc.	Chicago to Dallas	148,510	4,192	2,245,275	43,737	26,634,688	2,550,110	88.05
	Amarillo to Brownsville	115,243	6,584	1,686,493	38,005	10,267,644	2,084,201	80.92
	Houston to San Antonio and Corpus Christi	22,620	1,282	241,482	2,996	562,884	396,270	60.94
	Total	286,373	12,058	4,173,250	84,738	37,465,216	5,030,581	82.96
Chicago & Southern Air Lines, Inc.	Chicago to New Orleans	126,370	4,730	1,892,372	42,629	17,298,299	2,583,713	73.24
	Memphis to Houston	32,379	980	354,934	6,426	2,537,823	616,090	57.61
	Total	158,749	5,710	2,247,306	49,055	19,836,122	3,199,803	70.23
Continental Air Lines, Inc.	Denver to El Paso	91,479	2,583	778,801	17,155	5,808,989	989,281	78.72
	Pueblo to Tulsa	35,565	1,027	254,361	2,982	818,473	365,724	69.55
	Total	127,044	3,610	1,033,162	20,137	6,627,462	1,355,005	76.25
Delta Air Corporation	Charleston to Fort Worth	122,958	6,237	2,312,730	25,428	10,081,539	2,611,434	88.56
	Atlanta to Cincinnati	37,825	2,083	618,435	8,448	2,712,435	794,514	77.88
	Total	160,783	8,320	2,931,165	33,876	12,793,974	3,405,948	86.07
Eastern Air Lines, Inc.	New York to Brownsville and San Antonio	409,046	11,632	6,535,308	122,510	65,620,248	8,233,848	79.37
	New York to Miami	495,892	11,907	6,682,184	157,079	127,309,516	8,586,080	77.83
	Chicago to Jacksonville	164,218	6,462	2,759,647	73,116	34,008,246	3,293,503	84.56
	Atlanta to Tampa	24,453	1,188	388,677	8,895	3,470,163	513,513	75.69
	Total	1,093,609	31,209	16,365,816	361,600	230,408,173	20,596,944	79.46
Inland Air Lines, Inc.	Denver to Great Falls	39,560	704	248,492	3,970	725,044	483,931	51.35
	Cheyenne to Huron	25,266	0	0	105	23,473	0	0
	Total	64,826	704	248,492	4,075	748,517	483,931	51.35
Mid-Continent Airlines, Inc.	Minneapolis to Tulsa	57,657	1,614	466,941	8,771	2,047,781	789,677	59.13
	Minneapolis to St. Louis	29,271	0	0	197	74,516	0	0
	Total	86,928	1,614	466,941	8,968	2,122,297	789,677	59.13
National Airlines, Inc.	Jacksonville to Miami	48,420	2,453	547,168	5,724	1,492,232	677,880	80.72
	Jacksonville to New Orleans	75,193	2,627	894,815	12,523	4,769,584	1,052,702	85.00
	Total	123,613	5,080	1,441,983	18,247	6,261,816	1,730,582	83.32
Northeast Airlines, Inc.	Boston to Presque Isle & Moncton	42,169	1,855	418,174	6,131	1,627,029	885,549	47.22
	Boston to Montreal	5,976	0	0	27	2,375	0	0
	Total	48,145	1,855	418,174	6,158	1,629,404	885,549	47.22
Northwest Airlines, Inc.	Chicago to Seattle	292,751	6,642	3,481,874	101,129	73,625,770	4,747,935	73.33
	Minneapolis to Duluth	6,578	0	0	580	82,940	0	0
	Total	299,329	6,642	3,481,874	101,709	73,708,710	4,747,935	73.33
Pennsylvania-Central Airlines Corporation	Norfolk to Detroit	159,618	12,755	2,718,563	232,725	35,407,801	3,337,098	81.46
	Detroit to Milwaukee	13,231	1,065	168,426	4,484	821,191	277,851	60.62
	Pittsburgh to Buffalo	11,772	576	125,786	3,441	650,349	247,204	50.88
	Pittsburgh to Birmingham	34,786	1,112	369,713	2,970	925,818	725,508	50.96
	Total	219,407	15,508	3,382,488	243,620	37,805,159	4,587,661	73.73
Transcontinental & Western Air, Inc.	New York to Los Angeles	896,446	19,858	12,628,369	553,947	414,288,833	14,757,506	85.57
	Dayton to Chicago	13,822	943	204,367	44,452	7,819,049	256,681	79.62
	Boulder City to San Francisco	31,104	667	264,251	2,811	1,279,349	384,586	45.28
	Kansas City to Pittsburgh	255,414	6,709	3,502,479	181,509	97,300,767	4,079,139	88.07
	Detroit to St. Louis	46,772	2,570	715,880	35,646	9,417,755	857,365	83.50
	Total	1,243,558	31,207	17,405,316	818,183	530,105,753	20,534,367	84.76
United Air Lines Transport Corporation	New York to San Francisco	1,160,040	17,566	14,949,127	637,307	581,917,496	17,867,108	83.67
	Salt Lake City to Seattle	92,617	2,380	1,531,970	28,288	18,959,166	1,806,187	80.79
	Los Angeles to Seattle	356,233	15,371	6,175,791	159,513	68,693,809	6,747,933	91.52
	Seattle to Vancouver	5,120	374	49,051	2,567	318,436	101,800	48.16
	Total	1,614,030	35,691	22,705,939	827,675	669,929,707	26,613,148	85.32

(Continued on next page)

Domestic Air Carrier Operation Statistics for the Month of November 1942—Continued

Operator	Routes operated	Revenue miles flown	Revenue passengers carried	Revenue passenger miles flown	Express carried (pounds)	Express pound-miles flown	Passenger seat-miles flown	Revenue passenger load factor (percent)
Western Air Lines, Inc.	San Diego to Salt Lake City	121,606	5,090	1,831,203	97,715	47,967,445	2,320,934	78.90
	Salt Lake City to Great Falls	25,502	607	208,209	6,272	1,578,423	383,896	54.24
	Great Falls to Lethbridge	3,852	86	9,449	1,474	214,882	57,526	16.43
	Total	150,960	5,783	2,048,861	105,461	49,760,750	2,762,356	74.17
	Grand total	7,776,768	231,521	108,778,509	3,973,689	2,305,768,848	136,624,903	79.62

Passengers carried (total revenue and nonrevenue), 240,705.
 Passenger miles flown (total revenue and nonrevenue), 112,488,033.

Domestic Air Carrier Operation Statistics for the First 11 Months of 1942 Compared With the Same Period of 1941

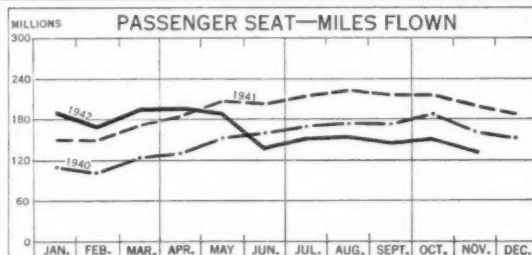
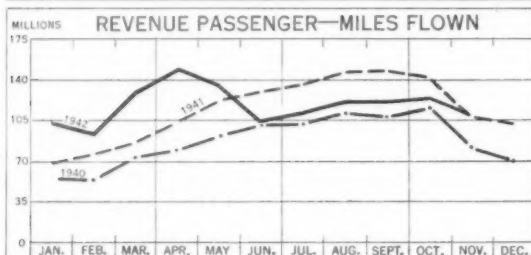
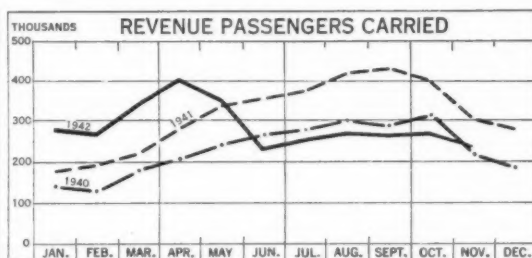
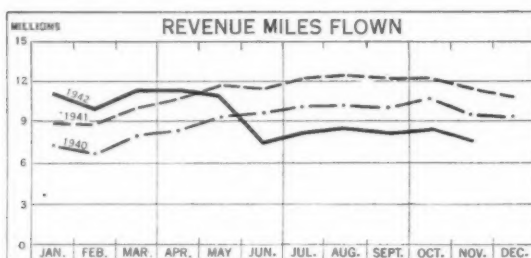
Operator	Revenue miles flown, January-November		Revenue passengers carried, January-November		Revenue passenger miles flown, January-November	
	1942	1941	1942	1941	1942	1941
All American Aviation, Inc.	780,946	729,775	0	0	0	0
American Airlines, Inc.	25,825,580	29,339,841	945,344	1,113,510	374,344,991	378,012,662
Braniff Airways, Inc.	4,028,828	5,084,983	140,506	139,381	46,683,455	41,979,120
Catalina Air Transport ¹	41,924	133,570	8,684	30,197	200,520	905,910
Chicago & Southern Air Lines, Inc.	2,043,928	2,129,807	69,352	56,743	26,366,530	21,391,073
Continental Air Lines, Inc.	1,524,198	1,448,261	34,780	18,479	9,312,231	5,468,501
Delta Air Corporation	2,232,179	2,586,608	100,578	71,616	30,852,911	19,504,646
Eastern Air Lines, Inc.	15,300,697	18,096,712	457,261	485,317	204,650,777	192,661,543
Inland Air Lines, Inc.	937,727	1,142,117	10,657	11,837	3,042,045	3,086,023
Mid-Continent Airlines, Inc.	1,444,135	2,022,948	28,146	33,053	7,111,550	8,467,062
National Airlines, Inc.	1,416,302	1,417,459	50,618	31,623	14,055,229	8,097,093
Northeast Airlines, Inc.	745,424	1,162,477	25,059	40,000	5,053,835	6,593,776
Northwest Airlines, Inc.	4,417,586	5,718,607	105,765	140,572	49,244,367	56,089,931
Pennsylvania-Central Airlines Corporation	3,925,918	5,894,922	251,570	315,764	52,346,027	60,077,074
Transcontinental & Western Air, Inc.	15,461,268	18,126,041	378,305	408,416	188,894,007	188,577,860
United Air Lines Transport Corporation	20,485,129	24,239,128	479,287	209,458	209,458,273	253,853,347
Western Air Lines, Inc.	2,194,559	2,904,772	69,711	65,340	22,909,539	21,406,742
Total	102,811,328	122,168,028	3,153,623	3,490,309	1,304,586,287	1,266,232,273
Index (1941=100)	84.16	100.00	90.35	100.00	103.03	100.00

Operator	Express carried (pounds), January-November		Express pound-miles flown, January-November		Passenger seat-miles flown, January-November		Revenue passenger load factor (percent) January-November	
	1942	1941	1942	1941	1942	1941	1942	1941
All American Aviation, Inc.	100,907	26,677	10,910,788	3,060,504	0	0	0	0
American Airlines, Inc.	10,743,557	4,840,705	5,375,158,273	2,365,571,881	505,325,432	540,766,863	74.08	69.90
Braniff Airways, Inc.	937,779	437,735	355,585,399	194,911,735	70,098,111	88,649,685	66.60	47.35
Catalina Air Transport ¹	64,088	148,062	2,011,530	4,441,860	379,320	1,342,500	68.68	67.48
Chicago & Southern Air Lines, Inc.	611,546	204,535	244,792,027	98,552,706	42,668,672	42,595,299	61.79	50.22
Continental Air Lines, Inc.	102,637	33,311	31,117,282	9,000,195	15,839,995	16,093,580	58.79	33.98
Delta Air Corporation	271,575	138,685	100,573,156	43,631,406	42,024,077	44,477,503	73.42	43.85
Eastern Air Lines, Inc.	3,695,480	1,857,190	2,254,895,599	1,130,449,678	293,970,583	356,977,880	69.62	53.97
Inland Air Lines, Inc.	38,165	18,894	7,106,107	5,273,044	8,571,901	11,421,170	35.49	27.02
Mid-Continent Airlines, Inc.	103,581	75,674	25,258,564	18,138,178	15,681,713	22,393,421	45.35	37.81
National Airlines, Inc.	203,165	63,034	56,332,246	16,690,657	19,266,684	18,322,044	72.95	44.19
Northeast Airlines, Inc.	81,317	69,560	21,277,075	10,964,863	14,152,852	16,055,083	35.71	41.07
Northwest Airlines, Inc.	1,036,431	635,371	785,088,374	357,276,791	75,413,867	111,859,317	65.30	50.14
Pennsylvania-Central Airlines Corporation	2,237,169	1,309,136	436,159,607	232,589,117	79,638,961	115,969,421	65.73	51.80
Transcontinental & Western Air, Inc.	6,522,501	2,508,821	4,218,019,959	1,580,004,726	206,273,349	317,673,218	70.94	59.35
United Air Lines Transport Corporation	8,506,995	3,700,728	6,844,711,614	2,754,193,924	329,816,954	379,779,033	81.70	66.64
Western Air Lines, Inc.	1,208,517	755,057	544,045,297	255,527,443	57,159,011	45,242,176	61.65	47.45
Total	36,467,810	16,823,885	21,343,102,867	9,080,278,728	1,816,281,482	2,129,619,063	71.83	59.46
Index (1941=100)	216.76	100.00	235.05	100.00	85.29	100.00	120.80	100.00

	January	February	March	April	May	June	July	August	September	October	November	Total
Passengers carried (total revenue and non-revenue), 1942	300,500	286,435	371,398	428,153	369,776	240,916	262,715	283,145	273,022	273,162	240,705	3,330,327
Passenger miles flown (total revenue and non-revenue), 1942	113,134,960	104,219,667	139,060,782	158,217,575	144,947,151	109,253,326	116,104,036	127,393,405	125,327,381	128,328,838	112,488,033	1,378,475,184

¹ Catalina Air Transport suspended operations June 24.

Comparative Charts of Domestic Operations for 1940, 1941, and the First 11 Months of 1942



Accidents

(Continued from page 16)

disintegration of the wing surfaces. The plane continued downward until it struck the ground.

Investigation disclosed that the left aileron was broken into two main parts. The two pieces were found, about 25 feet apart, a considerable distance from the main portion of the wreckage. Examination of the hinge and horn attachments of the aileron spars indicated that some of the wood portions were badly deteriorated. From all of the evidence available it appears that the left aileron failed at the point of attachment of the outer hinge and horn, causing the aircraft to go into a spin. The subsequent wing disintegration was apparently due to excessive air loads imposed during the uncontrolled flight which resulted from the loss of the left aileron.

Witnesses stated that just prior to take-off Deacon had discussed the limitations placard of the aircraft with a prospective buyer of the airplane and had cautioned him against any acrobatic maneuvers, particularly spins. This plane was placarded against intentional acrobatics. In view of this it is not considered likely that Deacon would have put the plane into an intentional spin. The aircraft, a high-wing monoplane, was approximately 11 years old.

Probable Cause.—Structural failure of aileron due to deterioration of wood structure.

Thrill Ride Ends In Death; Injury

An accident which occurred July 9, 1942, near Ricon Airport, Greene, R. I., resulted in fatal injury to Leon Romeo Benoit, and serious injuries to Hormis-

Army Pilot

(Continued from page 13)

about three-fourths of it was gone. The airliner then appeared to rise about 10 feet above them, hover for a moment, and fall off to the left and disappear.

Eye-Witnesses Testify

Mrs. Margaret Caldwell, housewife, and Raymond W. Martin, volunteer airplane spotter, who saw the accident from the ground, served as witnesses at the Board hearing. Both testified that just before the impact, the bomber was maneuvering above and behind the airliner and that the latter, after the impact, fell off to the left, then turned or spun slowly several times until it disappeared beyond obstructions. This testimony is consistent with that of the bomber pilot himself, who freely admitted that "I was getting my nose down a little bit, and was ready to trim it up and prepare for my let down when the impact occurred."

das Joseph Payette and Theodore Bellerive. Payette, the pilot, held a commercial pilot certificate with an instructor's rating and was rated to fly single and multi-engine landplanes of 970 h. p. or less. He had flown approximately 2,400 hours. Benoit held a student pilot certificate. Bellerive was not certificated as an airman. The aircraft, a Piper J5A, was demolished.

After the take-off Payette zoomed the flight office. The aircraft was then climbed to about 1,500 feet and shortly thereafter the pilot executed a loop. He then throttled the engine and was seen to slowly and deliberately stall the airplane into a right spin. After executing four or five turns in this spin, rotation was checked at an ex-

Sale of Planes

(Continued from page 13)

Violation a Crime

"(d) Violations.—Any person who wilfully violates any provision of this order, or who, in connection with this order, wilfully conceals a material fact or furnishes false information to any department or agency of the United States, is guilty of a crime, and upon conviction may be punished by fine or imprisonment. In addition, any such person may be prohibited from making or obtaining further deliveries of, or from processing or using, material under priorities control and may be deprived of priorities assistance.

"(e) Communications.—All reports to be filed and other communications concerning this order should be addressed to War Production Board, Aircraft Production Board, Washington, D. C., Ref.: L-262.

Issued this 26th day of January 1943.
Director General for Operations."

tremely low altitude. While Payette was trying to recover from the resulting dive, the plane struck the ground in a flat or nearly normal flying position.

Examination of the wreckage disclosed no indication of any mechanical failure of the aircraft or engine prior to impact. Airport personnel stated that Payette had made a practice of "thrilling his audiences" by spinning close to the ground before effecting recovery. However, the airport manager reported that to his knowledge Payette had never before spun the subject aircraft with two passengers in the rear seat.

Probable Cause.—Pilot's recklessness and disregard for safety in continuing an intentional spin to an altitude too low to effect complete recovery.

CIVIL AERONAUTICS BOARD

OFFICIAL ACTIONS

Abstracts of Opinions, Orders, and Regulations

ORDERS

ORDER No. 2092..... *December 30, 1942*

Postponed effective date of Civil Air Regulations Amendment No. 15-1 to March 1, 1943.

ORDER No. 2004..... *January 1, 1943*

Granted Mid-Continent Airlines, Inc., permission to withdraw its complaint against United Air Lines Transport Corporation, under sections 2, 404 (a), 1002 (i), and 1002 (a) of the Civil Aeronautics Act of 1938, as amended.

ORDER No. 2095..... *January 2, 1943*

Temporarily exempted certain air carriers from the provisions of section 401 (a) of the Civil Aeronautics Act of 1938, as amended, with regard to rendering scheduled air transportation service to and from Cincinnati, Ohio.

ORDER No. 2096..... *January 4, 1943*

Authorized Eastern Air Lines, Inc., to suspend service temporarily at Baton Rouge, La., for a period of 60 days, beginning on December 15, 1942.

ORDER No. 2097..... *January 4, 1943*

Revoked Order, Serial No. 600, dated July 25, 1940, which granted certain exemptions to Transcontinental & Western Air, Inc., and Marquette Airlines, Inc.; Dismissed applications of TWA and Marquette for approval of a contract.

ORDER No. 2098..... *January 5, 1943*

Temporarily exempted Pan American Airways, Inc., from the provisions of section 401 of the Civil Aeronautics Act of 1938, as amended, insofar as said provisions would otherwise prevent them from temporarily engaging in air transportation with respect to persons, property, and mail between Seattle, Wash., and Whitehorse, Yukon Territory, Canada, without stopping at Juneau, Alaska, and from providing service to Ketchikan, Alaska, on a flag-stop basis on flights operating between Seattle and Whitehorse without stopping at Juneau.

ORDER No. 2099..... *January 8, 1943*

Denied petition of United Air Lines Transport Corporation for reconsideration of order No. 2067. (Dockets 2-401-B-4, 153, 196, 389, 426.)

ORDER No. 2100..... *January 8, 1943*

Dismissed petitions of Air Traffic Conference of America re free and reduced-rate transportation.

ORDER No. 2101..... *January 8, 1943*

Denied petition of the Postmaster General for reconsideration of order No.

1869 re compensation for the transportation of mail by Pan American-Grace Airways, Inc. (Opinion and Order.)

ORDER No. 2102..... *January 8, 1943*

Denied petition of the Postmaster General for reconsideration of order No. 1913 re compensation for the transportation of mail by Pan American Airways, Inc. (Opinion and Order.)

ORDER No. 2103..... *January 8, 1943*

Denied petition of the Postmaster General for reconsideration of order No. 1993 re compensation for the transportation of mail by Eastern Air Lines, Inc. (Opinion and Order.)

ORDER No. 2104..... *January 8, 1943*

Denied petition of the Postmaster General for reconsideration of order No. 2026 re compensation for the transportation of mail by American Airlines, Inc., over routes Nos. 4 and 23.

ORDER No. 2105..... *January 8, 1943*

Directed Delta Air Corporation to show cause why the tentative findings and conclusions re compensation for the transportation of mail, etc., should not be made final.

ORDER No. 2106..... *January 11, 1943*

Granted a certificate of public convenience and necessity to Chicago and Southern Air Lines, Inc., authorizing it to include Little Rock, Ark., as an intermediate point on route No. 53, subject to certain conditions. (Opinion and Order.)

ORDER No. 2107..... *January 13, 1943*

Suspended for 6 months the student pilot certificate held by William R. Jacobs for certain violations of the Civil Air Regulations.

ORDER No. 2108..... *January 13, 1943*

Suspended for 6 months and thereafter until he shall pass written and flight examinations, the private pilot certificate held by William Simmington, Jr., for certain violations of the Civil Air Regulations.

ORDER No. 2109..... *January 11, 1943*

Directed Chicago and Southern Air Lines, Inc., to show cause why the tentative findings and conclusions re compensation for the transportation of mail, etc., over routes Nos. 8 and 53 should not be made final.

ORDER No. 2110..... *January 15, 1943*

Denied Waterman Airlines, Inc., permission to intervene re application of Pan American Airways, Inc., for an

amendment of its certificate of public convenience and necessity covering a route extending from Miami, Fla., to South America.

ORDER No. 2111..... *January 15, 1943*

Allowed Rickcliffe M. Decker up to and including January 23, 1943, in which to file an answer to the complaint.

ORDER No. 2112..... *January 15, 1943*

Denied petition of Transcontinental & Western Air, Inc., for reconsideration of order No. 2067 re granting a certificate of public convenience and necessity to Continental Air Lines, Inc., authorizing transportation between Denver, Colo., and Kansas City, Mo.

ORDER No. 2113..... *January 8, 1943*

Suspended for 15 days the student pilot certificate held by Truman H. Taylor for violating section 60.35 of the Civil Air Regulations. (Opinion and Order.)

ORDER No. 2114..... *January 13, 1943*

Dismissed complaint of the Administrator alleging Raymond S. Starzyk, holder of a student pilot certificate, violated certain provisions of the Civil Air Regulations. (Opinion and Order.)

ORDER No. 2115..... *January 16, 1943*

Revoked Tri-State Aviation Corporation's certificate of public convenience and necessity for failure to comply with conditions attendant thereto. (Opinion and Order.)

ORDER No. 2116..... *January 13, 1943*

Suspended for 30 days the student pilot certificate held by Homer R. Wall and for 60 days the private pilot certificate held by Clarence M. Sharpe for certain violations of the Civil Air Regulations; dismissed the complaint of the Administrator against Edmond Tobola. (Opinion and Order.)

ORDER No. 2117..... *January 16, 1943*

Dismissed application of White Pass Airways, Inc., for approval of the interlocking relationships of Victor I. Hahn, Alexander C. Blanchard, and William C. Blanchard.

ORDER No. 2118..... *January 18, 1943*

Revoked student pilot certificate held by Willard E. Umphrey for certain violations of the Civil Air Regulations.

ORDER No. 2119..... *January 18, 1943*

Suspended for 6 months the student pilot certificate held by William F. Gordon for certain violations of the Civil Air Regulations.

ORDER No. 2120..... January 20, 1943

Waived a portion of section 21.161 (b) of the Civil Air Regulations so as to permit Henry J. Brown to meet the requirements required by section 21.16.

ORDER No. 2121..... January 20, 1943

Authorized Braniff Airways, Inc., to suspend service temporarily on route No. 50.

ORDER No. 2122..... January 18, 1943

Directed Hawaiian Airlines, Ltd., to show cause why the tentative findings and conclusions re compensation for the transportation of mail, etc., over route No. 33 should not be made final.

ORDER No. 2123..... January 21, 1943

Adopted the Uniform System of Accounts for International Air Carriers dated January 1, 1943 (C. A. B. Form 2380 Manual 1-1-43).

ORDER No. 2124..... January 21, 1943

Suspended for 6 months the commercial pilot certificate and instructor rating held by Donald W. Murphy for certain violations of the Civil Air Regulations.

ORDER No. 2125..... January 21, 1943

Suspended for 30 days the student pilot certificate held by William M. Walderson for certain violations of the Civil Air Regulations.

ORDER No. 2126..... January 21, 1943

Revoked the commercial pilot certificate held by Arthur S. Davison for certain violations of the Civil Air Regulations.

ORDER No. 2127..... January 21, 1943

Dismissed complaint filed by the Administrator against William A. Crawford.

ORDER No. 2128..... January 18, 1943

Revoked the instructor rating held by Betty Lund (Betty Lund Cary), holder of a commercial pilot certificate, for certain violations of the Civil Air Regulations.

ORDER No. 2129..... January 23, 1943

Denied petition of the Postmaster General for reconsideration of order No. 2077 re compensation for the transportation of mail by Pennsylvania-Central Airlines Corporation.

ORDER No. 2130..... January 25, 1943

Suspended for 6 months the student pilot certificate held by Donald C. Vann for certain violations of the Civil Air Regulations.

ORDER No. 2131..... January 25, 1943

Revoked private pilot certificate held by William A. Herman for certain violations of the Civil Air Regulations.

ORDER No. 2132..... January 25, 1943

Suspended for 6 months student pilot certificate held by Granum Kaplan for certain violations of the Civil Air Regulations.

ORDER No. 2133..... January 27, 1943

Reopened Docket No. SR-394 and consolidated it with Docket No. SR-446 re Robert A. Nelson.

ORDER No. 2134..... January 27, 1943

Dismissed complaint of the Administrator alleging that Robert A. Nelson had demonstrated a lack of good moral character which required the suspension of his commercial pilot certificate; permitted him to apply for a flight instructor rating.

ORDER No. 2135..... January 27, 1943

Denied John F. Barber's petition for a waiver of the provisions of section 20.120 of the Civil Air Regulations.

ORDER No. 2136..... January 25, 1943

Supplemental order affirming order No. 1870 re denial of application of American Export Lines, Inc., for approval of the control of American Export Airlines, Inc.

ORDER No. 2137..... February 2, 1943

Amended certificate of public convenience and necessity of Northwest Airlines, Inc., so as to permit them to serve Green Bay, Wausau, and Eau Claire, Wis., points on route No. 3, subject to certain terms and conditions. (Opinion and order—Docket No. 463)

ORDER No. 2138..... January 29, 1943

Revoked private pilot certificate held by Richard C. Foster for certain violations of the Civil Air Regulations.

ORDER No. 2139..... January 29, 1943

Reopened case re Delbert Richardson, holder of a commercial pilot certificate, for the purpose of investigation.

ORDER No. 2140..... January 29, 1943

Directed Braniff Airways, Inc., to show cause why the tentative findings and conclusions re compensation for the transportation of mail, etc., over routes Nos. 9, 15, and 50 should not be made final. (Opinion and order—Docket No. 838)

ORDER No. 2141..... January 29, 1943

Dismissed complaint re Jack Adler v. Chicago and Southern Air Lines, Inc. (Opinion and order—Docket No. 717)

REGULATIONS

REGULATION No. 252.. December 24, 1942

Effective December 26, 1942:

Notwithstanding the provisions of section 60.471 of the Civil Air Regulations, military aircraft not equipped with radio may make flights for ferry or test purposes under day contact conditions at an altitude of more than 3,500 feet above the ground or water and within the limits of a civil airway: *Provided*, That

(1) A flight plan stating the proposed altitude and time to destination is filed with, and approved by an airway traffic control center; and

(2) The flight is conducted in accordance with section 60.58 of the Civil Air Regulations.

This regulation shall remain in effect until February 26, 1943.

REGULATION No. 253.. December 31, 1942

Effective January 1, 1943:

Notwithstanding the provisions of paragraph (h) of section 04.530 of the Civil Air

Regulations, Inland Air Lines, Inc., may for a period not to exceed 30 days from January 1, 1943, operate without complying with the above-mentioned paragraph.

REGULATION No. 254.. January 18, 1943

AMENDMENT No. 3 TO SECTION 239.1 OF THE ECONOMIC REGULATIONS—CHARTER TRIPS AND SPECIAL SERVICES BY AIR CARRIERS HOLDING CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

Effective January 18, 1943, section 239.1 of the Economic Regulation is amended in its entirety to read as follows:

"(a) *Approval required for special service.*—No air carrier holding a certificate of public convenience and necessity shall operate any charter trip or other special service (except flights originating and terminating in the territory comprised of Mexico, Central America, South America, and the countries and islands in the Caribbean area) either between points named in its certificate or otherwise, unless it shall have first secured approval thereof by the Commanding General, The Air Transport Command, or his designee, or unless authorized by such further regulations as the Board may from time to time promulgate."

"(b) *Exceptions.*—The provisions of paragraph (a) shall not apply to any charter trip or special service operated at the request of, and in aircraft owned by, the Navy Department."

REGULATION No. 255.. January 21, 1943

Effective January 21, 1943:

AMENDMENT No. 3 TO SECTION 202.2 OF THE ECONOMIC REGULATIONS—FORM OF ACCOUNTS OF AIR CARRIERS

1. Part (b) of Section 202.2 of the Economic Regulations is hereby amended to read as follows:

"(b) Each other air carrier engaged in regularly scheduled air transportation (not including, however, foreign air carriers) shall keep its accounts, records, and memoranda in accordance with the provisions of the Uniform System of Accounts for International Air Carriers issued by the Civil Aeronautics Board, dated January 1, 1943 (C. A. B. Form 2380 Manual 1-1-43) and such amendments thereto as may hereafter be prescribed by the Board; and shall bring its accounts, records and memoranda for the period January 1, 1943, to the effective date of this Regulation into conformity with such Uniform System of Accounts. *Provided, however*, That any such air carrier may request the approval of the Board to keep its accounts, records, and memoranda in accordance with the Uniform System of Accounts for Domestic Air Carriers issued by the Civil Aeronautics Board dated January 1, 1942 (C. A. B. Form 2780 Manual 1-1-42) and the amendment thereto, and, upon obtaining approval of the Board shall keep its accounts, records and memoranda in the manner thereof prescribed."

REGULATION No. 256.. December 11, 1942

AMENDMENT No. 1 OF SECTION 238.4 OF THE ECONOMIC REGULATIONS—TERMS, CONDITIONS AND LIMITATIONS OF CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY ISSUED UNDER SECTION 401 OF THE ACT AUTHORIZING FOREIGN AIR TRANSPORTATION

Effective ten days after the date of approval hereof by the President of the United States, section 238.4 of the Economic Regulations is hereby amended by adding at the end of part of said section the following paragraph:

"Subject to the provisions of section 405 (e) of the Act, non-stop service may be inaugurated between any two points at any time without the filing of the notice herein prescribed if, during the period from June 1, 1941, to May 31, 1942, inclusive, non-stop service was regularly scheduled by such holder between such points during a period of at least 10 days. This authorization shall remain in effect during the present war and thereafter until the Board shall by order declare the authorization terminated."

(Approved by the president January 30, 1943)

(See Regulations, page 24)

Status Of Air Regulations

As of February 1, 1943

HOW TO OBTAIN PARTS, AMENDMENTS, AND MANUALS

THOSE PARTS AND MANUALS ON WHICH A PRICE IS LISTED IN THE TABULATION WHICH FOLLOWS ARE ON SALE AT THE GOVERNMENT PRINTING OFFICE (SHOWN AS GPO IN TABLE), AND ARE NOT AVAILABLE FOR FREE DISTRIBUTION FROM THE CAA.

The Government Printing Office is the official sales agency for all government publications and is separate and distinct from the CAA and the Department of Commerce. The rules of the Superintendent of Documents require that remittances be made in advance of shipment of publications, either by coupons, sold in sets of 20 for \$1 and good until used, or by check or money order payable to the Superintendent of Documents, Government Printing Office. Currency is sent at sender's risk. Postage stamps, foreign money, and smooth coins are not acceptable. A discount of 25 percent is allowable to book dealers and quantity purchasers of 100 or more publications, on condition that the purchasers will adhere to the public sales price set by the Superintendent of Documents and that publications shall not be overprinted with any advertising matter.

Eventually, all parts and manuals will be placed on sale; meanwhile, those not yet on sale (carrying remark, "Order from CAA only") may be obtained without charge from the CAA upon demonstration of valid interest on the applicant's part.

The following tabulation carries in the right-hand column the numbers of all effective amendments to each part and manual issued subsequent to its publication. Parts and manuals obtained from the CAA will include all effective amendments, but amendments for parts and manuals purchased from GPO must be requested separately from the CAA. When requesting amendments from the CAA, please be sure to state part numbers for which they are desired.

ALL AMENDMENTS TO THE REGULATIONS, AND NOTICE OF NEW PARTS AND MANUALS, ARE PRINTED IN THE CIVIL AERONAUTICS JOURNAL AS RELEASED.

Bound volumes of the complete Civil Air Regulations are no longer available. Parts and amendments are punched for filing in standard three-ring binders.

For your guidance we have listed the parts and manuals applicable to the various airmen certificates issued.

Pilots:
Parts 01, 20, 60, 501, and manual 60.
Airline Transport Pilots:
Parts 01, 04, 21, 27, 40, 60, 61, 98, 501, and manuals 04 and 60.
Lighter-Than-Air Pilots:
Parts 01, 22, 60, 501, and manual 60.
Aircraft Mechanics:
Parts 01, 04, 15, 18, 24, 501, section 60, 32, and manuals 04, 15, and 18.
Aircraft Engine Mechanics:
Parts 01, 04, 13, 14, 18, 24, 501 and manuals 04, 14, and 18.
Parachute Riggers:
Parts 15, 24, and manual 15.
Air-Traffic Control-Tower Operators:
Parts 26, 60, and manual 60.
Aircraft Dispatchers:
Parts 27, 40, 60, 61, and manual 60.
Ground Instructors (rating in Civil Air Regulations):
Parts 01, 20, 51, 60, 501, and manual 60.

PARTS CANCELED AND UNASSIGNED

Canceled parts 00 and 03 now incorporated in part 501; canceled part 23 now incorporated in part 51; and canceled part 25 now incorporated in part 24. Parts 90-96, inclusive, canceled. All other part numbers not shown are unassigned.

Civil Air Regulations

Aircraft

PART NO.	TITLE	DATE	REMARKS	PRICE	EFFECTIVE AMENDMENTS
01	AIRWORTHINESS CERTIFICATES.....	10-15-42	On sale at GPO.....	\$0.05	
02	TYPE AND PRODUCTION CERTIFICATES.....	3-1-41	On sale at GPO.....	.05	
04	AIRPLANE AIRWORTHINESS.....	8-15-42	On sale at GPO.....	.15	04-1.
13	AIRCRAFT ENGINE AIRWORTHINESS.....	8-1-41	On sale at GPO.....	.05	
14	AIRCRAFT PROPELLER AIRWORTHINESS.....	7-15-42	On sale at GPO.....	.05	
15	AIRCRAFT EQUIPMENT AIRWORTHINESS.....	11-15-40	In stock; order from CAA only.....		15-1, 15-2.
16	AIRCRAFT RADIO EQUIPMENT AIRWORTHINESS.....	2-13-41	On sale at GPO.....	.05	
18	MAINTENANCE, REPAIR, AND ALTERATION OF CERTIFICATED AIRCRAFT AND OF AIRCRAFT ENGINES, PROPELLERS, AND INSTRUMENTS.	9-1-42	On sale soon at GPO.....	.05	

Airmen

20	PILOT CERTIFICATES.....	9-1-42	On sale at GPO.....	\$0.10	20-1, Reg. Ser. 242, 244, 247, 21-1.
21	AIRLINE TRANSPORT PILOT RATING.....	10-1-42	On sale at GPO.....	.05	Reg. Ser. 247.
22	LIGHTER-THAN-AIR PILOT CERTIFICATES.....	10-15-42	On sale at GPO.....	.05	
24	MECHANIC CERTIFICATES.....	10-1-42	On sale at GPO.....	.05	20-1.
26	AIR-TRAFFIC CONTROL-TOWER OPERATOR CERTIFICATES.....	7-1-42	On sale at GPO.....	.05	27-1.
27	AIRCRAFT DISPATCHER CERTIFICATES.....	9-1-42	On sale at GPO.....	.05	
29	PHYSICAL STANDARDS FOR PILOTS.....	6-1-42	On sale at GPO.....	.05	

Air Carriers

40	AIR CARRIER OPERATING CERTIFICATION.....	11-1-42	On sale at GPO.....	\$0.10	
----	--	---------	---------------------	--------	--

Air Agencies

50	FLYING SCHOOL RATING.....	11-1-40	On sale at GPO.....	\$0.05	87, 113, 50-3, Reg. No. 216. ²
51	GROUND INSTRUCTOR RATING.....	7-1-42	On sale at GPO.....	.05	
52	REPAIR STATION RATING.....	10-1-42	On sale at GPO.....	.05	
53	MECHANIC SCHOOL RATING.....	8-1-42	On sale at GPO.....	.05	

Air Navigation

60	AIR-TRAFFIC RULES.....	7-15-42	On sale at GPO.....	\$0.10	60-1 thru 60-6.
61	SCHEDULED AIR-CARRIER RULES.....	10-15-42	On sale at GPO.....	.05	61-1 thru 61-3.
66	FOREIGN AIR-CARRIER REGULATIONS.....	1-15-42	On sale at GPO.....	.05	

Miscellaneous

98	DEFINITIONS.....	10-15-42	On sale at GPO.....	\$0.05	
99	MODE OF CITATION OF REGULATIONS.....	11-15-40	In stock; order from CAA only.....		

¹ Out of stock.

² No copies available. (Waiver of requirements.) Consult CAA inspector for specific provisions of this amendment.

(Status of Air Regulations continued on following page)

Status of Air Regulations

(Continued from preceding page)

Regulations of the Administrator

PART NO.	TITLE	DATE	REMARKS	PRICE	EFFECTIVE AMENDMENTS
501	AIRCRAFT REGISTRATION CERTIFICATES.....	11-1-41	In stock; order from CAA only.....		
510	GENERAL REGULATIONS, WASHINGTON NATIONAL AIRPORT.....	9-26-41	In stock; order from CAA only.....		
511	GENERAL AERONAUTICAL RULES FOR THE WASHINGTON NATIONAL AIRPORT.....	9-26-41	In stock; order from CAA only.....		
525	NOTICE OF CONSTRUCTION OR ALTERATION OF STRUCTURES ON OR NEAR CIVIL AIRWAYS.....	11-1-41	In stock; order from CAA only.....		1.
531	SEIZURE OF AIRCRAFT.....	12-8-41	In stock; order from CAA only.....		
532	REPRODUCTION AND DISSEMINATION OF CURRENT EXAMINATION MATERIALS.....	1-15-43	In stock; order from CAA only.....		
600	DESIGNATION OF CIVIL AIRWAYS.....	3-1-42	Not published ¹		1 through 15. ¹
601	DESIGNATION OF AIRWAY TRAFFIC CONTROL AREAS, ETC.....	1-15-42	Not published ¹		1 through 24. ¹

¹See Air Navigation Radio Aids.

Civil Aeronautics Manuals

04	AIRPLANE AIRWORTHINESS.....	2-1-41	On sale at GPO.....	\$0.50	Release 50, 97, ¹ 105, ¹ 117, ¹ 140. ¹
14	AIRCRAFT PROPELLER AIRWORTHINESS.....	12-1-38	In stock; order from CAA only.....		
15	AIRCRAFT EQUIPMENT AIRWORTHINESS.....	7-1-38	In stock; order from CAA only.....		
16	AIRCRAFT RADIO EQUIPMENT AIRWORTHINESS.....	2-13-42	In stock; order from CAA only.....		Release 62.
18	MAINTENANCE, REPAIR, AND ALTERATION OF CERTIFICATED AIRCRAFT AND OF AIRCRAFT ENGINES, PROPELLERS, AND INSTRUMENTS.....	6-1-41	On sale at GPO.....	.50	
50	FLYING SCHOOL RATING.....	12-40	In stock; order from CAA only.....		Release 77.
52	REPAIR STATION RATING.....	2-41	In stock; order from CAA only.....		
53	MECHANIC SCHOOL RATING.....	5-40	In stock; order from CAA only.....		
60, part 1	SUMMARY OF FLIGHT RULES.....	12-1-40	In stock; order from CAA only.....		
60, part 2	AIRPORT TRAFFIC CONTROL.....	10-1-40	Out of stock.....		
60, part 3	AIRWAY TRAFFIC CONTROL.....	12-1-40	Out of stock.....		

¹ Only pertinent pages furnished.

Regulations

(Continued from page 22)

AMENDMENT 61-2----- January 8, 1943

Effective January 8, 1943:

Part 61 of the Civil Air Regulations is amended as follows:

Add a new subparagraph (7) to paragraph (c) of section 61.7803 to read as follows: "61.7803 *Pilots' compartment*—“(7) Pilot trainees in the employ of the air carrier. This provision shall terminate at the end of the war.”

AMENDMENT 61-3----- January 13, 1943

Effective January 13, 1943:

Part 61 of the Civil Air Regulations is amended as follows:

Strike section 61.7700 and insert in lieu thereof the following:

“61.7700 *Icing conditions*—No air carrier shall dispatch or operate aircraft in air transportation through any known or probable icing condition unless the aircraft is equipped for de-icing wings, propellers, and for such other parts of the aircraft as the Administrator may prescribe to assure safety of the flight under the particular conditions to be encountered. When an icing condition is encountered in flight the pilot shall, if possible, immediately notify his radio ground station of such fact and the company shall immediately transmit such information to the nearest office of the United States Weather Bureau in accordance with § 61.733.”

AMENDMENT 21-1----- October 14, 1942

Effective October 14, 1942:

Part 21 of the Civil Air Regulations is amended as follows:

1. Strike section 21.29 and insert in lieu thereof the following:

“21.29—*Reexamination*. (a) An applicant who has failed any prescribed theoretical examination may apply for reexamination at any time after the expiration of 30 days from the date of such failure or after he has received not less than 5 hours instruction in each subject failed from a person employed

by an airline to instruct in such subject or from whichever one of the following persons is appropriate:

“(1) A certificated airline transport pilot;
“(2) A certificated ground instructor rated for the subject;

“(3) A person qualified to instruct in the theory of instrument flight.

“(b) An applicant who has failed to pass any prescribed practical examination or test may apply for reexamination only after (1) he has logged at least 5 additional hours of flying solely by instruments and at least 5 additional hours of dual flight instruction with a certificated flight instructor or a certificated airline transport pilot, or (2) he has acquired such part of the above practice or instructions as may, in the opinion of the Administrator, warrant reexamination. Upon meeting the requirements of this subsection (b) an applicant for reexamination shall be deemed to meet the 5 hours solo flight time requirements set forth in § 21.161 (b).
(c) Applicant shall present a statement from the instructor indicating that he has given the applicant qualified to pass the flight test or that part of the theoretical examination in which such instruction was given, whichever is appropriate.”

2. Amend the table of contents to conform to this amendment.

AMENDMENT 60-6----- January 1, 1943

Effective January 1, 1943:

Part 60 of the Civil Air Regulations is amended as follows:

Strike section 60.348 and insert in lieu thereof the following:

60.348 *Airspace restrictions*—Areas in which the flight of aircraft is prohibited or restricted are classified as caution areas, danger areas, and prohibited areas.

60.349 *Caution area*—An area designated by the Administrator in which a visible hazard to aircraft in flight exists and which should be avoided if practicable.

60.3481 *Danger area*—An area designated by the Administrator in which an invisible hazard to aircraft in flight exists. No flight of aircraft shall be conducted in this area without specific authority issued by the agency having jurisdiction over the danger area.

60.3482 *Prohibited area*—An area established by Executive Order of the President of the United States. No flight of aircraft shall be made in this area except aircraft actually engaged in defense missions, or otherwise in accordance with the Executive Order establishing such areas.

NOTE—Restricted areas are indicated on aeronautical charts and published in Weekly Notice to Airmen, issued by the Administrator of Civil Aeronautics.

New Aeronautical Publications

Among recent government publications dealing with the subject of aeronautics are the following:

CIVILIAN AIR REGULATIONS: Civil Aeronautics Board. Part 21: Airline transport pilot rating; 1942. 7 pages. Price 5 cents. Classification No. C 31.209: 21 (as amended to Oct. 1, 1942).

CIVIL AIR REGULATIONS: Civil Aeronautics Board. Part 27: Aircraft Dispatcher certificates; 1942. 3 pages. Price 5 cents. Classification No. C 31.209: 27 (as amended to Sept. 1, 1942).

DIGEST OF CIVIL AIR REGULATIONS, for pilots: Civil Aeronautics Administration. Civil Aeronautics Bulletin 22; 6th edition: Publication explaining to the student pilot in as nonlegal phraseology as practicable those provisions of the civil air regulations which most directly affect the pilot. 74 pages, 11 maps. Price 20 cents. Classification No. C 31.103: 22.

METEOROLOGICAL YEARBOOK: Weather Bureau. United States meteorological yearbook, 1940; 1942. Issued as the Report of the chief of the Weather Bureau prior to 1935. 145 pages, maps. Price \$1.00 (cloth). Classification No. C 30.25: 940.

When ordering these publications, send remittance by postal money order, express order, coupons, or check to the Superintendent of Documents, Government Printing Office, Washington, D. C. Always give title, issuing office, or classification number when listed.

ENTS

7, 140.

estab-
ment of
t shall
ctually
rise in
estab-
ed on
Weekly
ministra-

ions

blica-
aero-

nautics
t pilot
cents.
nended

nautics
er cer-
cents.
nended

pilots:
Civil
: Pub-
ilot in
those
which
pages,
on No.

bureau.
arbook,
of the
1935.
cloth).

tions,
order,
to the
overn-
D. C.
e, or

RNAL